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Five-Star Burma Cherishes Still-New Freedom

Robinson Crusoe's Island Crumbling into Sea

Skyscraping Mohawks Erect Manhattan's Steel Tepees

Zoo Train Links South Africa's Two Capitals

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Making Music in Mandalay—On harplike instruments two Burmese schoolgirls accompany a third, who sings, keeping time with a pair of tinkling percussion discs and two blocks of wood. In school they learn the traditional art, music, dancing, and theater of this southeast Asian land. Their attire is the colorful *longyi*, a wrap-around skirt worn by both Burmese men and women.

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In the dusty heartland of Burma the Chinese agent comes to the city of Mandalay. He sees an ancient wooden palace above a forest of gilded shrines, and yellow-robed Buddhist monks on every hand. The chant of pagoda rites and the scent of heavy incense mingle with the purple haze of sunset. Mandalay's worn and winding streets are strangely quiet as the city bows its head in prayer.

Buddhism is the soul of Burma, and the heart of Buddhist worship is in Mandalay.

From near and far tribesmen come to buy and sell in Mandalay's many bazaars—Kachins from the Hukawng valley, Shans from eastern hills, tribes from the border of Tibet. In Mandalay grievances are swept away in a hearty laugh, the joy of a good bargain.

Silks, lacquerware, and carved wood for which Burma is famous, bird's-nest soup, a copy of the Moslem Koran—almost anything can be bargained for in the crowded stalls of this city of 163,000 people. Children in pink pantaloons dance to gongs and wailing flutes. Puppeteers stage a miniature battle between tiger and elephant alongside artisans who polish mother-of-pearl filigree and delicate sculptured figurines.

A group of Karen women from Moulmein, with necks elongated by layers of silver circlets, mount a hill to their favorite shrine. This is no place for a communist troublemaker, where Buddha rules.

At docks along the Irrawaddy River the Chinese agent finds workers loading teakwood, cotton, peanuts onto a steamer which had come with "paddles chunkin' from Rangoon to Mandalay . . . where the flyin'-fishes play." Joining the ship on its return voyage, he passes cotton plantations, village clusters of thatched huts, and the city ruins of ancient Pagan, where fearsome stylized lions guard 5,000 crumbling pagodas.

Gaunt steel derricks of the oil fields fade astern as the vessel approaches the broad, river-laced delta of the Irrawaddy. Farmers in broad-brimmed hats sweat behind bullocks and water buffalo in flooded fields. Here rice is king—as it is in the fertile lower Salween and Sittang river basins, and in the Arakan region north along the Bay of Bengal.

On rice fields totaling nearly three times the size of New Jersey, Burma grows some 7,000,000 tons of rice annually. The 3,000,000 tons exported to rice-hungry Ceylon, India, Japan, and Indonesia bring three fourths of the nation's export income.

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Twenty-four miles from the sea the river steamer docks among ships, barges, and sampans in Rangoon's bustling harbor through which 80 percent of Burma's exports pass. Home to some 500,000 people, cosmopolitan Rangoon presents imposing Western-style buildings, parks, and boulevards—and Oriental snake charmers who fondle king cobras.

Here in the capital the Chinese agent sees many flags of the new

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Beneath Mergui's Gleaming Pagoda, Humpbacked Zebus Cart Sacks of Burma Grain

Five-Star Burma Cherishes Still-New Freedom

Moonlight glints on the waters of the Shweli River in northern Burma. Suddenly a splash breaks the night stillness; a shadowy figure swims one-armed across the current. The other arm holds a bundle above the water's reach.

Wading onto muddy Burmese soil near Namhkam where only the river separates communist China from democratic Burma, the man opens the bundle and dons a Chinese coolie coat. In its folds he conceals the bundle's other contents: instructions to communist agents in Burma; a handful of Burmese coins called *kyats*.

As dawn overtakes the furtive traveler he hears the far-off sound of trained elephants and buffalo hauling teak logs in the forest. Unnoticed, he joins a group of Chinese coolies trudging along a hairpin curve of the Burma Road.

As many as 6,000 migratory workers cross the 1,200-mile-long Burma-China frontier in a year. Many travel the Stillwell Road to Bhamo, there to work in the amber and jade mines during the dry season. When the mines close with the onset of the rainy southwest monsoon in late May, they return to China to labor in the rice fields.

Side roads take the communist agent to the Bawdwin silver deposits and the Mogok ruby and sapphire mines where Shan tribesmen work. Here among the hill tribes of upper Burma trouble is easy to stir up. Tribesmen resent the far more numerous delta dwellers of lower Burma, whose way of life is so different, and who control not only the government but most of the nation's wealth.

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Robinson Crusoe's Island Crumbling into Sea

The island stamped in fiction by a famous footprint—that of Robinson Crusoe's Man Friday—is slowly washing into the South Pacific Ocean. The trouble? Too many goats.

Wild goats are cropping the vegetation from 36-square-mile Más a Tierra, largest of the volcanic Juan Fernandez group 400 miles off the coast of Chile. Too, souvenir-hunters carrying away exotic ferns, cabbage trees, and other unique plants help cause erosion to chew away the earth.

Here Scottish seaman Alexander Selkirk was marooned four solitary years in the early 18th century. Daniel Defoe chose a West Indies setting for his famous novel, but Selkirk's bleak and lonely existence on Más a Tierra inspired the story.

The goats, a boon to both the real Selkirk and the fictional Crusoe, date back to the late 16th century. Shortly after Spanish navigator Juan Fernández discovered the islands, English and Dutch buccaneers, using craggy Más a Tierra as hideout, brought goats in for meat, milk, and skins. These multiplied rapidly despite ferocious dogs landed by the Spanish to kill off the pirates' food supply.

Whalers, sea-lion hunters, lumbermen, political prisoners, scientists came to the Chilean island. Botanists have found it "a living museum crowded with rare specimens." Its waters are an icthyologist's paradise.

Steamers now regularly anchor in Cumberland Bay (illustration below), supplying Más a Tierra's 400 people. Tourists visit Selkirk's cave and 3,000-foot lookout and watch lobstermen who each year export some 500,000 pounds of the spiny giants, some weighing 12 pounds.

Despite the abundance of lobsters the natives rarely eat them. They catch and eat croakers, smelt, corbina, even flying fish. But they prefer American canned salmon.

References—Juan Fernandez appears on the Society's map of South America. "A Voyage to the Island Home of Robinson Crusoe," *National Geographic Magazine*, Sept., 1928.

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republic—white stars on a red and blue background. Each star symbolizes one of the five states that formed the Union of Burma on January 4, 1948. British-ruled since the 19th century, Burma chose complete separation from the Commonwealth. In the entire history of the British Empire, only two other nations have done likewise—the United States and the Republic of Ireland.

Towering above the prospering city, golden Shwe Dagon Pagoda glitters in the sun—a symbol of serenity in a land of violence. Violence among the soft-spoken, gentle, trusting, gay-hearted Burmese seems a paradox. But in Burma a hint of insult or injustice often brings the dagger flash of a *dha*.

In a land of political passion and regional separatism, Prime Minister U Nu and his elected parliament grapple with problems of social reform, the new secular educational system, a free public health program. Some 120 different tribal and racial groups and a freebooting remnant of the Chinese Nationalist army cause continuing civil strife. Militants among Burma's largest and most active minority, the Karens, rebelled in August, 1948, demanding autonomy. The peace-loving prime minister was forced to put down this and other insurrections by force of arms.

Hungry, overpopulated China eyes Texas-size Burma avidly. Burma's 19,000,000 people produce more food than they consume; theirs is one of the few countries in the world whose economy is in the black. National pride in self-sufficiency prompted Burma to request an end to U. S. foreign aid contributions in June, 1953.

After eating a steaming bowl of rice in Rangoon's Chinese quarter, the communist agent stretches out on a bamboo mat. Musing on the discord he has noted, he dreams of a China-controlled Burma. But the threat of outside aggression may well forge unity in these proud, independent peoples. And through the window, strains of the Burmese national anthem chanted by a group of students jar the Chinese dream:

Until the end of time
This is our land.

References—Burma appears on the National Geographic Society's map of India and Burma. Write the Society, Washington 6, D. C., for a map price list. "Burma: Where India and China Meet," *National Geographic Magazine*, Oct., 1943; "Burma Road, Back Door to China," Nov., 1940; "Working Teak in the Burma Forests," Aug., 1930; GEOGRAPHIC SCHOOL BULLETINS, Feb., 8, 1954, "Burma Celebrates 'Union Day'." *School and library discount price for Magazine issues a year old or less, 50¢; through 1946, 65¢. Write for prices of earlier issues.*

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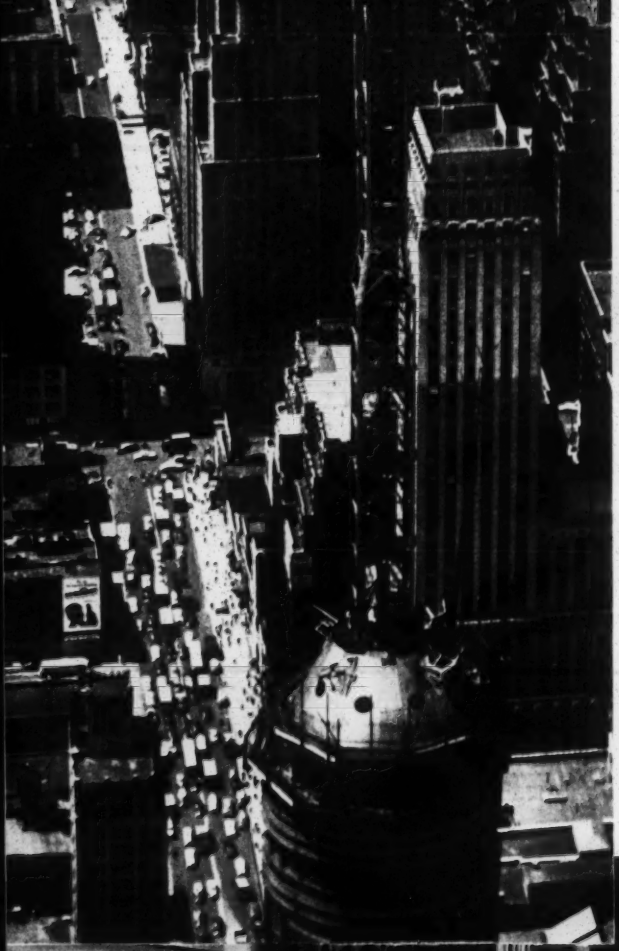
Buddha in Alabaster—An ancient craft, an ancient religion meet in this Burmese sculptor's shop.



of all high-steel jobs—raising the television antenna atop the Empire State Building. For this work riveters received $3.25 an hour, but as one onlooker remarked, "Whatever they get, it isn't enough!"

Since the booming 1920's, when skyscrapers were sprouting like beanstalks, some 400 Mohawks have settled in Brooklyn, a short subway ride from where the demand for high-steel workers is greatest. They live in comfortable, modern apartments, watch Western movies—about Indians, and raise bilingual families.

After a day risking his scalp at perilous heights, Mike relaxes with his wife and children (below). At nearby Cuyler Presbyterian Church, where Sunday services are held once a month in Mohawk, the family enjoys singing such old favorites as *Ni-io ta-tia-ta-nons-tat* ("Rock of Ages"). When Mike retires, he will probably return to his Caughnawaga home.

For the full story of Mike and his friends see "The Mohawks Scrape the Sky" in the July, 1952, *National Geographic Magazine*.

NATIONAL GEOGRAPHIC PHOTOGRAPHER
B. ANTHONY STEWART

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Skyscraping Mohawks Erect Manhattan's Steel Tepees

High in the New York sky, wherever skyscrapers are going up, surefooted Mohawk Indians from Canada's Caughnawaga Reservation are at work.

Above, Mike Tarbell catches red-hot rivets in a bucket, thrusts them with tongs into matching holes in girders for his teammates to cap. Behind this steel skeleton of the UN General Assembly Building rise other Mohawk-built skyscrapers.

Walking narrow beams 500 to 1,000 feet in the air, where one misstep means death, these men move as calmly as though down on the sidewalk.

Like tiny flies, three Mohawks (left) clamber a breathtaking 1,472 feet above traffic-choked 34th Street to put finishing touches on the most spectacular of all high-steel jobs—raising the television antenna atop the Empire State Building. For this

mated $4,000,000 annual moving cost plus days in transit when government stands still. It also would ease Cape Town's housing shortage.

Crowded cities are a far cry from the boundless veld that most Americans picture as South Africa. Yet, like America, the African land has both dense urban settlement and wide-open spaces. In fact, the Union and the United States have a number of things in common. Both were settled in the 17th century by pioneers from western Europe. Both are rich in natural resources which foster industrial growth.

The history of both nations includes emigration inland from a settled coast. In 1836 the Boers, fearful of encroaching English colonists, "inspanned" their ox teams to covered wagons, counterparts of the American Conestogas, and began the Great Trek into the unknown interior. For daring exploits and grueling hardships this migration of the *Voortrekkers* ranks with the westward march of America's pioneers. Bantu tribes pushing south fought the white emigrants; hunger, thirst, and sickness aided the enemy. But the Voortrekkers won. Their own "California gold rush" occurred when the 150-mile-long Witwatersrand (Ridge of White Waters) was discovered to be the richest gold-mining area in the world. Surpassing anything in America, the fabulous diamond deposits of Kimberley had previously revealed their bonanza.

The South African Union, about one sixth the size of the United States, also outdoes the North American republic in number of flags, national anthems, and official languages. It boasts two of each! British Union Jack and Boer tricolor—orange, white, and blue—fly under the blue South African sky. Patriots stand both for *God Save the Queen* and *Die Stem van Suid Afrika (The Voice of South Africa)*. The official languages are English and Afrikaans. The latter is based on the language of the Dutch settlers, adapted to their African way of life.

More than two thirds of the 13,153,000 people are native Africans, chiefly Bantus whose many tribal divisions include Basutos, Xosas, and Zulus. Many live in native reserves similar to America's Indian reservations. Thousands have come to the cities to work in mills and mines.

The 472,666 square miles of the Union are for the most part high, dry, rolling country. Veld (grassy plain) covers much of the central plateau which rises from 4,000 to 6,000 feet above sea level. On the east the land ascends sharply in the Drakensberg Mountains where peaks top 10,000 feet. Between the mountains and the Indian Ocean more rain and higher temperatures produce subtropical forests and lush grasslands. Atlantic-side hills are dry.

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A Gleaming Fortune in Gold Pours from a Reduction Furnace on the Witwatersrand near Johannesburg

Flowers, many found nowhere else in the world, set the land ablaze with color. Orchids, lilies, daisies, and

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Flat-Topped Table Mountain Overlooks South Africa's Parliament Houses at Cape Town

Zoo Train Links South Africa's Two Capitals

The Zoo Train is rolling south in the Union of South Africa. No, leopards, lions, and giraffes are not moving to summer homes—it's the government that is shifting base.

Every year in January government officials move from the Union's administrative capital, Pretoria, in the Transvaal, to Cape Town, the legislative capital on the south coast. Members of Parliament escape the 1,000-mile shuttle, for they meet only in Cape Town.

Civil servants and their families crowd onto special trains together with their pets, not normally allowed. The din of dogs, cats, parrots, and children has given this unusual caravan the name Zoo Train.

The scene is repeated each midyear when Parliament adjourns and officialdom returns inland to Pretoria.

Why two capitals? The answer stems from the days when Dutch and British colonists fought for possession of the land. The British won, but the influence of the numerically superior Boers (descendants of Dutch and French Huguenot settlers) remained strong. In 1910, when the two former Boer republics of Transvaal and Orange Free State joined British Natal and Cape Colony to form the Union of South Africa, both national groups sought to head the government. A compromise gave each a capital.

Some South Africans suggest centrally located Bloemfontein as a single capital. It is already capital of Orange Free State Province and seat of the Union's Supreme Court. Such a change would save the esti-

Sundays, relaxing in the barracks-like atmosphere of the mine compounds, African workers let off steam with tribal dances. Up to 50 or 60 men take part, with as many more singing, beating drums, playing xylophones and flutes. At the end of their dance Zulus fling themselves flat on the ground. Shangaans in long white trousers and vests perform a number they call *Kwaya*, from the English word choir. Other tribesmen decked in tiger-cat skins flourish painted shields and long pointed spears. Later they are likely to rattle off in an old Ford.

References—The Union of South Africa is shown on the Society's map of Africa. "Safari Through Changing Africa," *National Geographic Magazine*, Aug., 1953; "Roaming Africa's Unfenced Zoos," March, 1950; "The Cities That Gold and Diamonds Built," Dec., 1942 (out of print; refer to your library); "Busy Corner—the Cape of Good Hope," Aug., 1942; "Under the South African Union," April, 1931; GEOGRAPHIC SCHOOL BULLETINS, March 22, 1954, "Africa's Kruger Park to Be Fenced."

De-Scented Skunks Make Ascent in Pet World

Washington's Lafayette Square, opposite the White House, a haven where bird and animal fanciers gather to feed squirrels and pigeons, recently snubbed a visitor named Princess. Princess, with malice toward none, was clean, intelligent, cuddly—but also a skunk.

She snuffled along the ground close behind her master, attracting a lot of attention—from afar. Then someone surmised the pet was deodorized and approached Princess. Soon other admirers clustered around. Winning ways of these new pets are captivating more and more Americans.

Dainty black and white striped "wood-pussies" trot happily through New York's Central Park, fashionable ladies in tow, or curl up on silken cushions in Park Avenue apartments. Indoors they are no problem, for they are easily housebroken and meticulously tidy.

Children love their affectionate, curious natures. They are great mousers, come when called, and follow master or mistress closer than a dog. Deodorized by the veterinary when about six weeks old, they are not expensive to buy or to feed, as they enjoy most family foods: meats, cereals, bread, milk, eggs, and lots of water.

The skunk, in natural habitat, only partly deserves his

CHARLES P. FOX

pale blue plumbago spread a dazzling floral tablecloth over Cape Town's 3,550-foot Table Mountain.

Uitlanders (foreigners) often are surprised to learn that manufactures bring in most of the national income. Agriculture, particularly sheep-raising, comes next. Mining ranks third despite the Union's producing almost half the world's gold and 97 percent of its gem diamonds.

Small factories that sprang up when World War I cut off South Africa's commerce have become great industries which make the Union almost self-sufficient. World War II expanded the agricultural-processing, textile, cement, auto-assembly plants, as well as the chemical and explosives factories essential to the mines. It also added an iron and steel industry. The major industrial area is southern Transvaal which, together with Natal, produces most of the nation's coal.

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A Zulu Belle of Northern Natal

Agricultural science overcomes scanty rainfall and shallow soil to produce corn, wheat, peanuts, fruit, sugar cane, vegetables, and tobacco. Enough is raised to feed the population and leave some for export. The Green Cross serves the Union's ailing soil as the Red Cross ministers to human needs. Each September it campaigns for soil conservation.

In Orange Free State, once the Union's most unproductive province, newly found "reefs" of gold reveal deposits of uranium which may add many extra millions to the area's income. Workings have been likened to "a big American city turned upside down." Instead of soaring skyward, structures bore 8,000 to 9,000 feet into the earth. Elevators carry workers into the depths. The mines may nearly double South Africa's annual gold yield—about $475,000,000. Present output centers in the Transvaal's Witwatersrand, east and west of Johannesburg.

Backbone of the industrial and mining labor force are the Union's black millions. South Africa's government, heavily Boer in personnel, makes a studied policy of keeping them in menial jobs and inferior station, as well as hobbling their freedom to vote, hold office, and travel freely.

Wool Earns Three Times as Much as Diamonds for South Africa: Cape Province

W. ROBERT MOORE, NATIONAL GEOGRAPHIC STAFF

"Sorry, Chum, But I Got Here First," bristles Jimmy Skunk as Bobby Coon heaves unexpectedly into view. The two pets, each sporting a fashionable streak of other-color fur, are good pals except when it comes to food, especially eggs.

NATIONAL GEOGRAPHIC PHOTOGRAPHER
JOHN E. FLETCHER

malodorous reputation. True, he can squirt stinging, evil-smelling amber fluid out of twin sacs near the base of his tail and score hits up to ten feet. But he tries to stay out of trouble. Accustomed to deference from animals large and small, the skunk triggers his atomizer only when threatened. He first stamps his front paws to show he's in no mood to play. He chastises sparingly, for it takes him three weeks to replace a single ounce.

Pet skunks are seeing the world. Willie, mascot of an Arctic weather station, got to within 1,500 miles of the North Pole. A big-city fancier takes his de-scented skunk for subway rides. He always gets a seat.